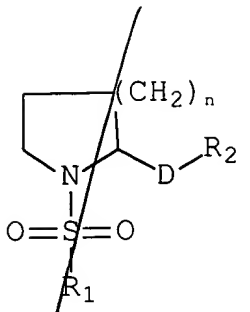
formula (I):



I

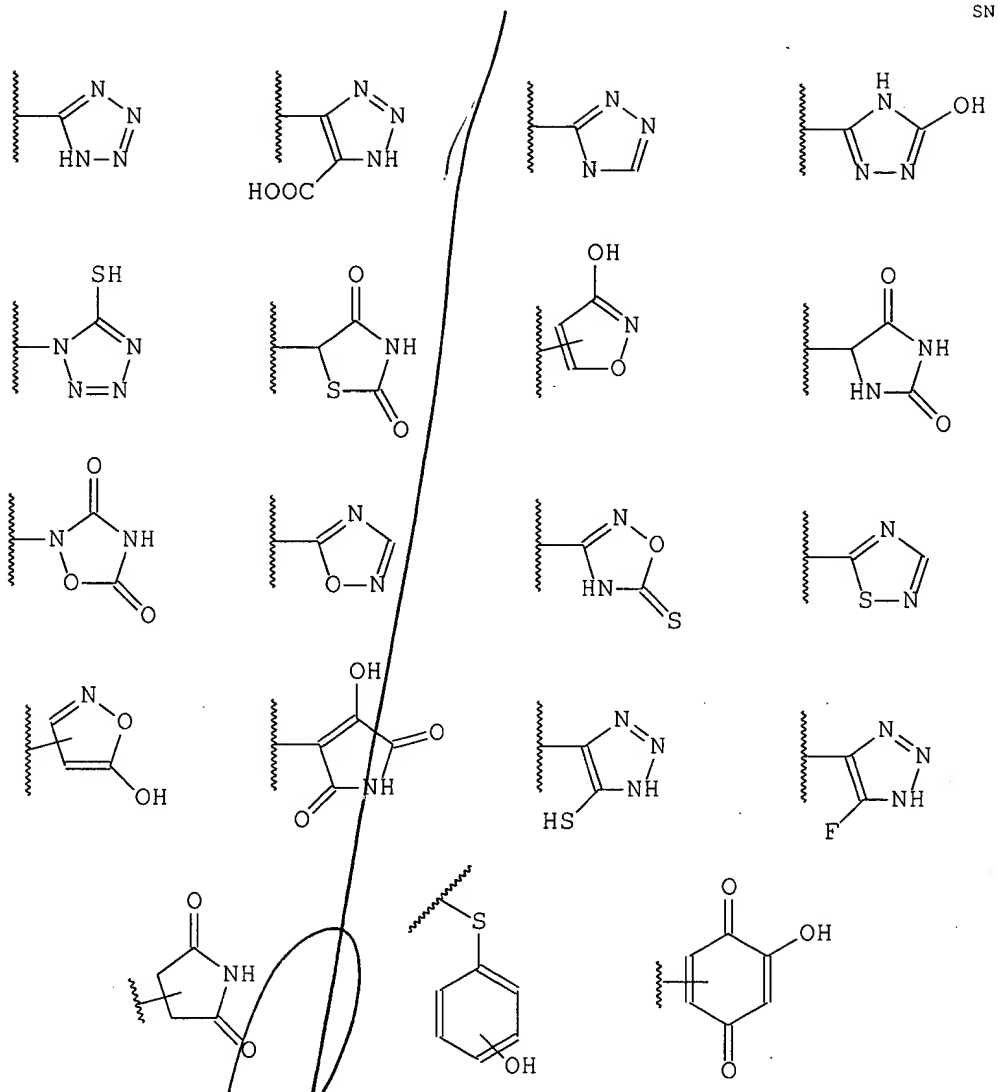
where

n is 1;

R_1 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, aryl, heteroaryl, carbocycle, and heterocycle;

D is a bond, or a C_1-C_{10} straight or branched chain alkyl, C_2-C_{10} alkenyl or C_2-C_{10} alkynyl;

R_2 is a carboxylic acid isostere selected from the [following] group consisting of:



[where the atoms of said ring structure may be optionally substituted at one or more positions with R^3]

wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or carboxylic acid isostere is optionally substituted with one or more substituents selected from R^3, where

R^3 is hydrogen, hydroxy, halo, haloalkyl, thiocarbonyl, alkoxy, alkenoxy, alkylaryloxy, aryloxy, arylalkyloxy, cyano, nitro, imino, alkylamino, aminoalkyl, sulfhydryl, thioalkyl, alkylthio, sulfonyl,

C_1-C_6 straight or branched chain alkyl, C_2-C_6 straight or branched chain alkenyl or alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or CO_2R^4 where R^4 is hydrogen or C_1-C_9 straight or branched chain alkyl or alkenyl;

or a pharmaceutically acceptable salt or solvate thereof;

provided that:

when D is a bond, and R_2 is a substituted or unsubstituted carbocyclic or heterocyclic ring structure,

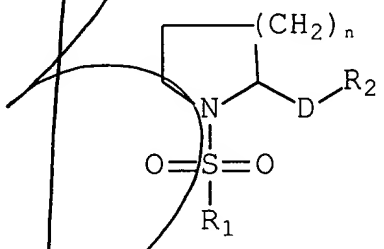
then R_1 is not substituted or unsubstituted carbocycle or heterocycle;

further provided that:

when D is not a bond and at least one of D and R_2 contains at least one S or O,

then R_1 is not methyl or substituted phenyl.

4. (Amended) [The] A compound [of claim 1, wherein] having the formula (I):



I

where

n is 1;

R_1 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, aryl, heteroaryl, carbocycle, and heterocycle;

D is a bond, or a C_1-C_{10} straight or branched chain alkyl, C_2-C_{10} alkenyl or C_2-C_{10} alkynyl; [the carboxylic acid or carboxylic acid isostere of]

R_2 is a carboxylic acid or carboxylic acid isostere selected from the group consisting of:

$-COOH$, $-SO_3H$, $-SO_2HNR^3$, $-PO_2(R^3)_2$, $-CN$, $-PO_3(R^3)_2$, $-OR^3$, $-SR^3$, $-NHCOR^3$, $-N(R^3)_2$, $-CON(R^3)_2$, $-CONH(O)R^3$, $-CONHNHSO_2R^3$, $-COHNSO_2R^3$, and $-CONR^3CN$;

wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or carboxylic acid isostere is optionally substituted with one or more substituents selected from R^3, where

R^3 is hydrogen, hydroxy, halo, haloalkyl, thiocarbonyl, alkoxy, alkenoxy, alkylaryloxy, aryloxy, arylalkyloxy, cyano, nitro, imino, alkylamino, aminoalkyl, sulfhydryl, thioalkyl, alkylthio, sulfonyl, C_1-C_6 straight or branched chain alkyl, C_2-C_6 straight or branched chain alkenyl or alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or CO_2R^4 where R^4 is hydrogen or C_1-C_9 straight or branched chain alkyl or alkenyl;

or a pharmaceutically acceptable salt or solvate thereof;

provided that:

when D is a bond, and R_2 is COOH,

then R_1 cannot be substituted naphthyl;

further provided that:

when D is a bond, and R_2 is COOH or $CONHR_3$,

then R_1 is not hydroxyl, methyl, ethyl, substituted or unsubstituted thioethyl, benzothiazolyl, substituted benzopyran, substituted benzopyrrole, substituted benzoxazole, substituted 5-membered heterocycle containing two N and one S heteroatoms, substituted or unsubstituted phenyl, phenylethyl, naphthyl, pyridyl, thienyl, quinoline, tricyclic ring, aminoethyl, or benzyl;

further provided that:

when D is a bond, and R_2 is a substituted or unsubstituted carbocyclic or heterocyclic ring structure,

then R_1 is not substituted or unsubstituted carbocycle or heterocycle;

further provided that:

when D is a bond, and R_2 is hydroxy, alkoxy, $-SO_2(phenyl)$, $N(R_3)_2$, substituted thio or alkylthio, -NCO, $-PO_3(Me)_2$, or -NCOOC(ethyl)phenyl,

then R_1 is not naphthalene, ethylene, substituted tricyclic ring, or substituted or unsubstituted phenyl;

further provided that:

when D is C_1-C_3 alkyl or hexenyl, and R_2 is hydroxyl,

then R_1 is not substituted or unsubstituted phenyl, or

benzoimidazole;

further provided that:

when D is a bond and R_2 is cyano,

then R_1 is not 4-methylphenyl;

further provided that:

when D is methyl, and R_2 is cyano or COOH,

then R_1 is not substituted phenyl;

further provided that:

when D is methyl, and R_2 is methoxy or $N(R_3)_2$,

then R_1 is not methyl, ethyl, phenylethyl, chloro substituted alkyl, substituted oxirane, substituted aziridine wherein one of the carbons is replaced with an oxygen, substituted or unsubstituted propenyl, substituted phenyl, benzyl, or trifluoro substituted C_2-C_3 alkyl or alkenyl;

further provided that:

when D is propyl, and R_2 is methoxy,

then R_1 is not ethylene, cyano substituted ethyl, or triethoxy substituted propyl;

further provided that:

when D is not a bond and at least one of D and R_2 contains at least one S or O,

then R_1 is not methyl or substituted phenyl.

5. (Amended) The compounds, (2S)-1-(phenylmethyl)sulfonyl-2-

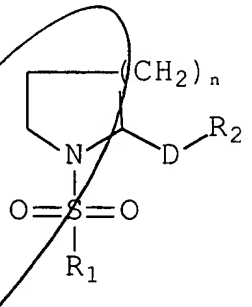
hydroxymethyl pyrrolidine; (2S)-1-(phenylmethyl)sulfonyl-2-pyrrolidinetetrazole; and compounds 1-9, 21-25, 30-38, 42-57, 59, and 66-97.

6. (Amended) A pharmaceutical composition, comprising:

a) an effective amount of [an N-linked sulfonamide of an N-heterocyclic carboxylic acid or carboxylic acid isostere] the compound of claim 3; and

b) a pharmaceutically acceptable carrier.

7. (Amended) [The] A pharmaceutical composition, comprising: [of claim 6, wherein the N-linked sulfonamide of N-heterocyclic carboxylic acid or carboxylic acid isostere comprises a compound of formula (I):



I

where

n is 1-3;

R_1 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, aryl, heteroaryl, carbocycle, or heterocycle;

D is a bond, or a C_1-C_{10} straight or branched chain alkyl, C_2-C_{10}

alkenyl or C_2-C_{10} alkynyl;

R_2 is carboxylic acid or a carboxylic acid isostere;

wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or carboxylic acid isostere is optionally substituted with one or more substituents selected from R^3, where

R^3 is hydrogen, hydroxy, halo, haloalkyl, thiocarbonyl, alkoxy, alkenoxy, alkylaryloxy, aryloxy, arylalkyloxy, cyano, nitro, imino, alkylamino, aminoalkyl, sulfhydryl, thioalkyl, alkylthio, sulfonyl, C_1-C_6 straight or branched chain alkyl, C_2-C_6 straight or branched chain alkenyl or alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or CO_2R^4 where R^4 is hydrogen or C_1-C_9 straight or branched chain alkyl or alkenyl;

or a pharmaceutically acceptable salt, ester, or solvate thereof]

a) an effective amount of the compound of claim 4; and

b) a pharmaceutically acceptable carrier.

8. (Amended) The pharmaceutical composition of claim [7] 6, wherein [R_2 is a carbocycle or heterocycle containing any combination of CH_2, O, S, or N in any chemically stable oxidation state, wherein any of the atoms of said ring structure are optionally substituted in one or more positions with R^3] the compound is selected from the group consisting of compounds 1-9, 21-25, 30-38, 42-57, 59, and 66-97.

11. (Amended) The pharmaceutical composition of claim 7,

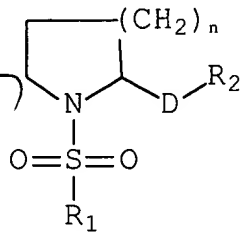
wherein the [N-linked sulfonamide of an N-heterocyclic carboxylic acid] compound is selected from the group consisting of compounds 1-9, 21-25, 30-38, 42-57, 59, and 66-97.

14. (Amended) A method of treating a neurological disorder in an animal, comprising:

administering to the animal an effective amount of [an N-linked sulfonamide of an N-heterocyclic carboxylic acid or carboxylic acid isostere] the compound of claim 3 to stimulate growth of damaged peripheral nerves or to promote neuronal regeneration.

20. (Amended) The method of claim 14, wherein the [N-linked sulfonamide of an N-heterocyclic carboxylic acid or carboxylic acid isostere] compound is non-immunosuppressive.

21. (Amended) [The] A method of [claim 14, wherein the N-linked sulfonamide of an N-heterocyclic carboxylic acid or carboxylic acid isostere comprises a compound of formula (I):



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where

n is 1-3;

R_1 is selected from the group consisting of hydrogen, C_1-C_9 straight or branched chain alkyl, C_2-C_9 straight or branched chain alkenyl, aryl, heteroaryl, carbocycle, or heterocycle;

D is a bond, or a C_1-C_{10} straight or branched chain alkyl, C_2-C_{10} alkenyl or C_2-C_{10} alkynyl;

R_2 is carboxylic acid or a carboxylic acid isostere;

wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or carboxylic acid isostere is optionally substituted with one or more substituents selected from R^3, where

R^3 is hydrogen, hydroxy, halo, haloalkyl, thiocarbonyl, alkoxy, alkenoxy, alkylaryloxy, aryloxy, arylalkyloxy, cyano, nitro, imino, alkylamino, aminoalkyl, sulfhydryl, thioalkyl, alkylthio, sulfonyl, C_1-C_6 straight or branched chain alkyl, C_2-C_6 straight or branched chain alkenyl or alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or CO_2R^4 where R^4 is hydrogen or C_1-C_9 straight or branched chain alkyl or alkenyl;

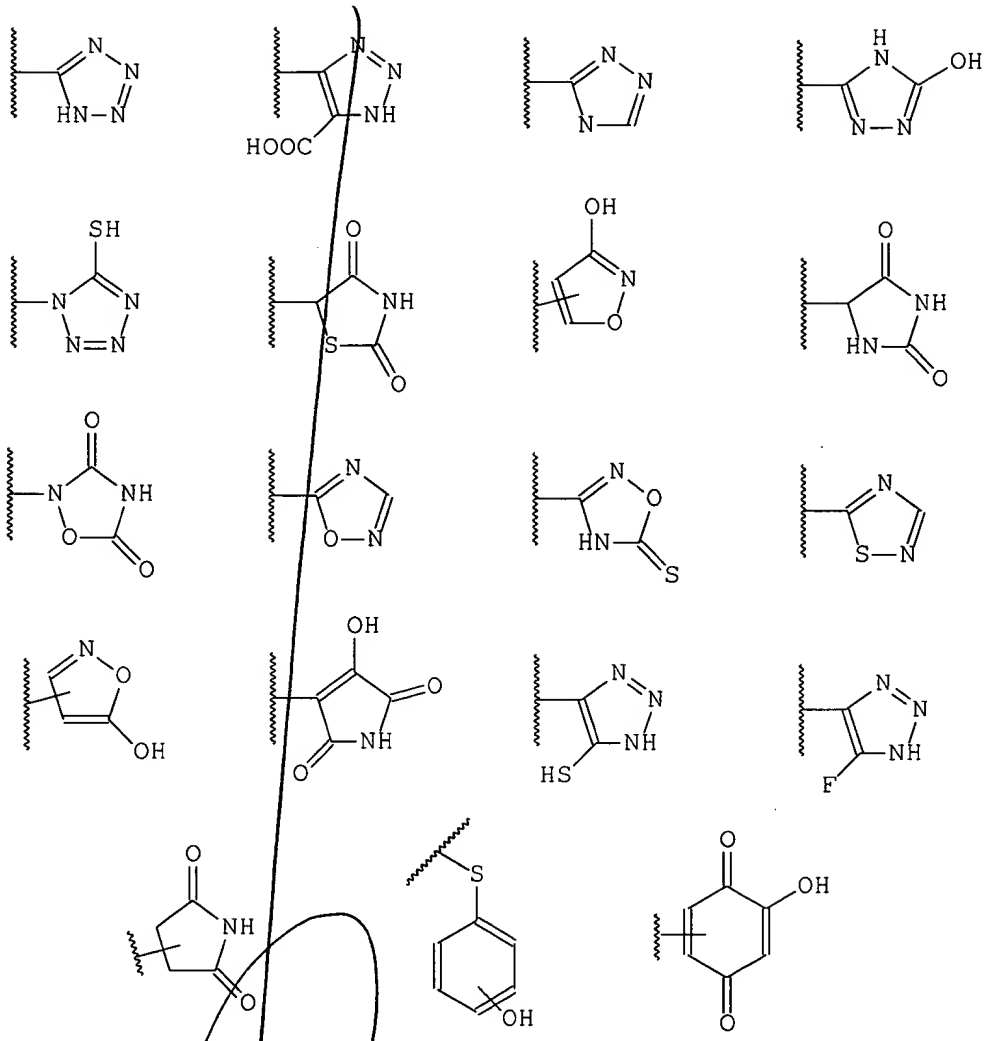
or a pharmaceutically acceptable salt, ester, or solvate thereof] treating a neurological disorder in an animal, comprising:

administering to the animal an effective amount of the compound of claim 4 to stimulate growth of damaged peripheral nerves or to promote neuronal regeneration.

22. (Amended) The method of claim 21, wherein [R_2 is a carbocycle or heterocycle containing any combination of CH_2, O, S,

or N in any chemically stable oxidation state, wherein any of the atoms of said ring structure are optionally substituted in one or more positions with R^3] the neurological disorder is selected from the group consisting of peripheral neuropathies caused by physical injury or disease state, physical damage to the brain, physical damage to the spinal cord, stroke associated with brain damage, and neurological disorders relating to neurodegeneration.

23. (Amended) The method of claim 21, wherein [R_2 is selected from the following group:



where the atoms of said ring structure may be optionally substituted at one or more positions with R^3] the neurological disorder is selected from the group consisting of Alzheimer's Disease, Parkinson's Disease, and amyotrophic lateral sclerosis.

24. (Amended) The method of claim 21, wherein [R_2 is selected from the group consisting of:

-COOH, $-SO_3H$, $-SO_2HNR^3$, $-PO_2(R^3)_2$, -CN, $-PO_3(R^3)_2$, $-OR^3$, $-SR^3$, $-NHCOR^3$,

$-N(R^3)_2$, $-CON(R^3)_2$, $-CONH(O)R^3$, $-CONHNHSO_2R^3$, $-COHNSO_2R^3$, and $-CONR^3CN$] the neurological disorder is Alzheimer's Disease.

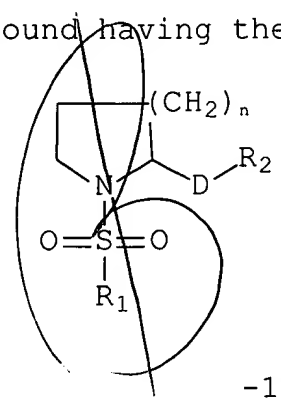
25. (Amended) The method of claim [14] 21, wherein the [N-linked sulfonamide of an N-heterocyclic carboxylic acid compound is selected from the group consisting of compounds 1-97] neurological disorder is Parkinson's Disease.

26. (Amended) The method of claim [14] 21, [further comprising administering a neurotrophic factor different from formula (I)] wherein the neurological disorder is amyotrophic lateral sclerosis.

27. (Amended) The method of claim [26] 21, wherein [said neurotrophic factor different from formula (I) is selected from the group consisting of neurotrophic growth factor, brain derived growth factor, glial derived growth factor, cilial neurotrophic factor, insulin growth factor and active truncated derivatives thereof, acidic fibroblast growth factor, basic fibroblast growth factor, platelet-derived growth factors, neurotropin-3, and neurotropin 4/5] the compound is non-immunosuppressive.

Please add the following new claims:

--72. A compound having the formula (I):



I

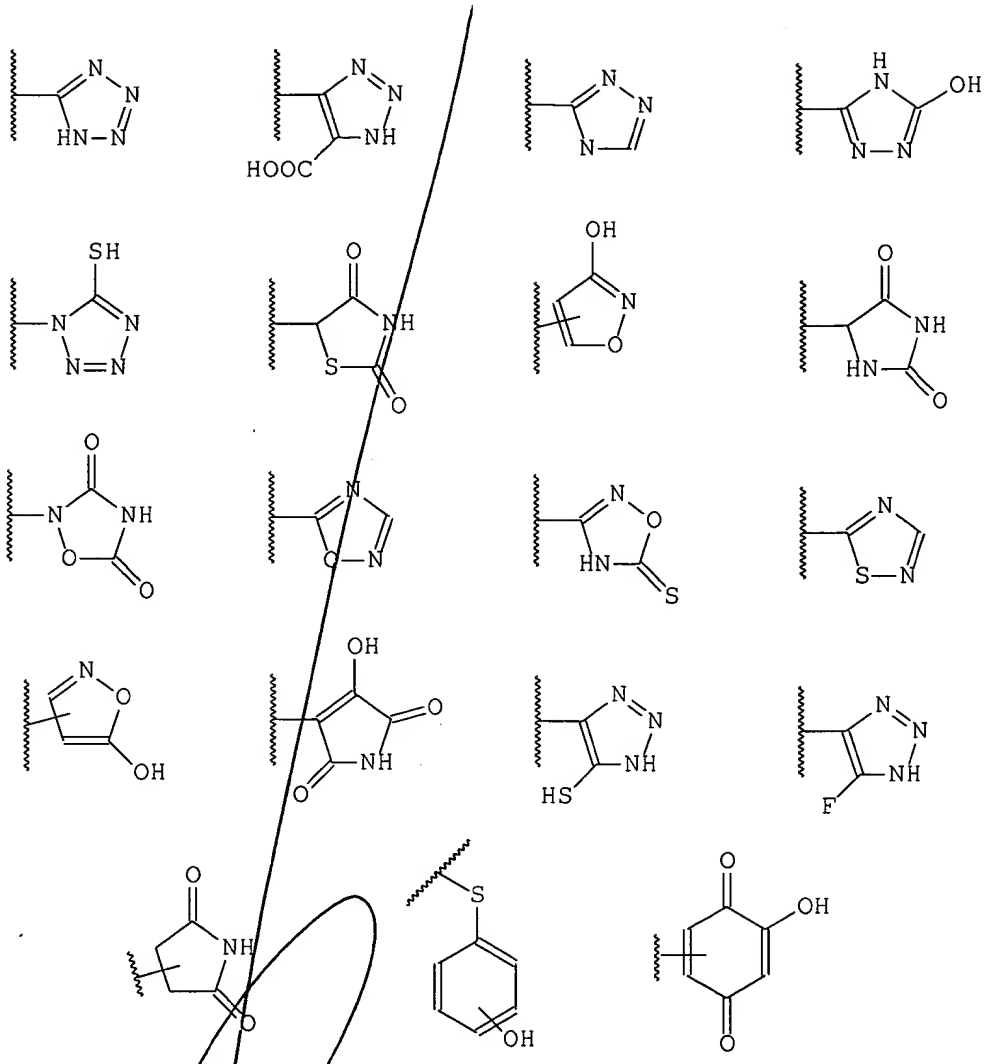
wherein

n is 1;

R_1 is selected from the group consisting of hydrogen, C_2-C_9 straight or branched chain alkyl, or C_2-C_9 straight or branched chain alkenyl;

D is a bond, or a C_1-C_{10} straight or branched chain alkyl, C_2-C_{10} alkenyl or C_2-C_{10} alkynyl;

R_2 is a carboxylic acid isostere selected from the following group:



wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or carboxylic acid isostere is optionally substituted with one or more substituents selected from R^3, where

R^3 is hydrogen, hydroxy, halo, haloalkyl, thiocarbonyl, alkoxy, alkenoxy, alkylaryloxy, aryloxy, arylalkyloxy, cyano, nitro, imino, alkylamino, aminoalkyl, sulfhydryl, thioalkyl, alkylthio, sulfonyl, C_1-C_6 straight or branched chain alkyl, C_2-C_6 straight or branched chain alkenyl or alkynyl, aryl, heteroaryl, carbocycle,

heterocycle, or CO_2R^4 where R^4 is hydrogen or C_1-C_9 straight or branched chain alkyl or alkenyl;

or a pharmaceutically acceptable salt or solvate thereof.

73. A pharmaceutical composition, comprising:

a) an effective amount of the compound of claim 72; and

b) a pharmaceutically acceptable carrier.

74. A method of treating a neurological disorder in an animal, comprising:

administering to the animal an effective amount of the compound of claim 72 to stimulate growth of damaged peripheral nerves or to promote neuronal regeneration.

75. The method of claim 74, wherein the compound is non-immunosuppressive.

76. The method of claim 74, wherein the neurological disorder is selected from the group consisting of peripheral neuropathies caused by physical injury or disease state, physical damage to the brain, physical damage to the spinal cord, stroke associated with brain damage, and neurological disorders relating to neurodegeneration.

77. The method of claim 74, wherein the neurological disorder is selected from the group consisting of Alzheimer's Disease, Parkinson's Disease, and amyotrophic lateral sclerosis.

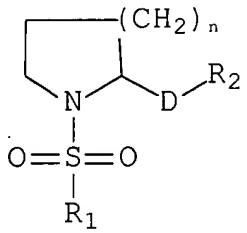
78. The method of claim 74, wherein the neurological disorder

is Alzheimer's Disease.

79. The method of claim 74, wherein the neurological disorder is Parkinson's Disease.

80. The method of claim 74, wherein the neurological disorder is amyotrophic lateral sclerosis.

81. A compound having the formula (I):



I

wherein

n is 1;

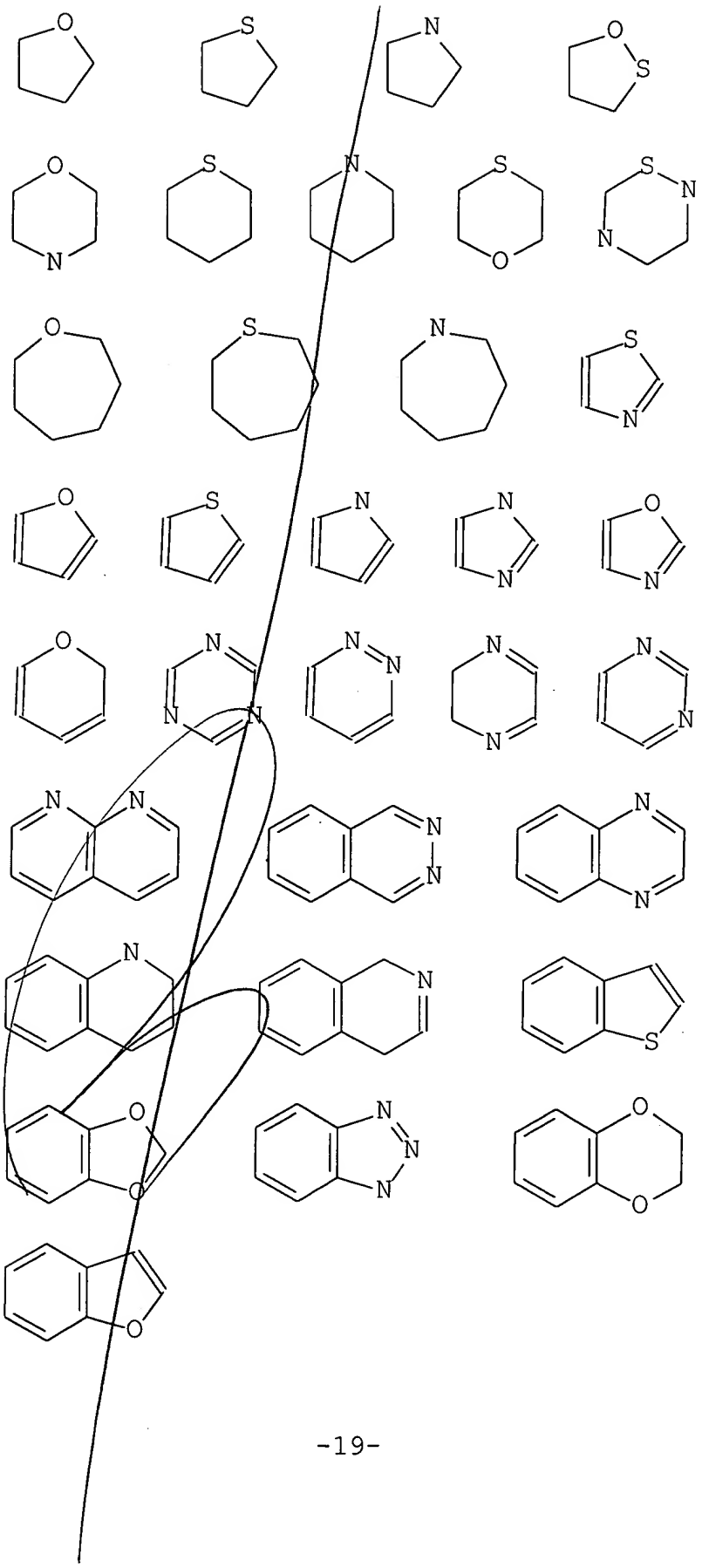
R_1 is selected from the group consisting of hydrogen, C_4-C_9 straight or branched chain alkyl, C_4-C_9 straight or branched chain alkenyl, aryl, heteroaryl, carbocycle, and heterocycle;

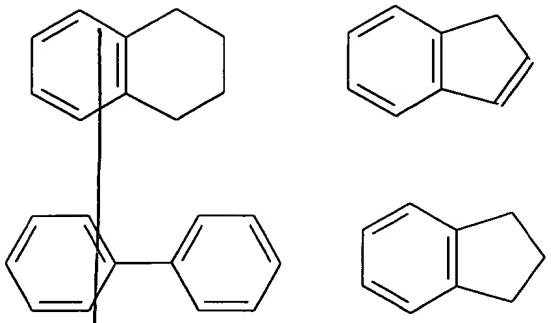
D is a bond, or a C_1-C_{10} straight or branched chain alkyl, C_2-C_{10} alkenyl or C_2-C_{10} alkynyl;

R_2 is a carboxylic acid or carboxylic acid isostere selected from the group consisting of:

-COOH, $-SO_3H$, $-SO_2HNR^3$, $-PO_2(R^3)_2$, -CN, $-PO_3(R^3)_2$, $-OR^3$, $-SR^3$, $-NHCOR^3$, $-N(R^3)_2$, $-CON(R^3)_2$, $-CONH(O)R^3$, $-CONHNHSO_2R^3$, $-COHNSO_2R^3$, and $-CONR^3CN$;

wherein said aryl, heteroaryl, or heterocycle is selected from the group consisting of:





wherein said alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocycle, or carboxylic acid isostere is optionally substituted with one or more substituents selected from R^3, where

R^3 is hydrogen, hydroxy, fluorine, bromine, iodine, haloalkyl, thiocarbonyl, alkoxy, alkenoxy, alkylaryloxy, aryloxy, arylalkyloxy, cyano, nitro, imino, alkylamino, aminoalkyl, sulfhydryl, thioalkyl, alkylthio, sulfonyl, C_1-C_6 straight or branched chain alkyl, C_2-C_6 straight or branched chain alkenyl or alkynyl, aryl, heteroaryl, carbocycle, heterocycle, or CO_2R^4 where R^4 is hydrogen or C_1-C_9 straight or branched chain alkyl or alkenyl; or a pharmaceutically acceptable salt or solvate thereof.

82. A pharmaceutical composition, comprising:

a) an effective amount of the compound of claim 81; and

b) a pharmaceutically acceptable carrier.

83. A method of treating a neurological disorder in an animal, comprising: